

## **Renewable Lubricants, Inc.**

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## Bio-E.P.™ 80W90 Gear Oil GL-4



## "Biobased Lubricants that Perform Like Synthetics"

Bio-E.P.™ 80W90 Gear Oil is designed to meet the GL-4 requirements of spiral bevel transmission and moderate service hypoid gears. In industrial applications, it can be used as an Multi-Viscosity EP Gear Oil for lubricating spur, helical, bevel, and worm gear configurations where a multi-grade 80W90 can replace ISO 150 or 220 for cold temperature applications. This formula has combined Stabilized HOBS technology with synthetic base stocks and mild EP/antiwear additives. The result is an ultimately biodegradable<sup>1</sup> product which has the long life heat stability but which additionally offers the protection advantages of increased gear life through extremely high film strength and excellent low temperature performance. Bio-E.P.™ 80W90 Gear Oil is an <u>ENVIRONMENTALLY RESPONSIBLE</u> lubricant that is formulated from renewable agricultural plant resources. We believe Earth's environmental future rests in the use of renewable material.

## **Typical Specifications**

SAE Gear Grade	80W90
Specific Gravity @60 <sup>o</sup> F (D-287)	0.92
VISCOSITIES:	
@100 <sup>o</sup> C., cSt. (D-445)	19.2
@40 <sup>o</sup> C., cSt. (D-445)	121
Viscosity Index (D-2270)	180
Flash Point, COC, <sup>O</sup> C (D-92)	280
Pour Point, <sup>o</sup> C (D-97)	-30
Copper Corrosion Strip 3hr @ 100 <sup>o</sup> C (D-130)	1A
4 Ball Wear, 1h, 167 <sup>o</sup> F, 1200 RPM, 40kg (D-4172)	.30
FZG Test (DIN 51517)	>12
Demulsibility (D-2711)	Pass
Foam Sequence I, II, III (D-892)	Pass
Rust Prevention (D-665 A&B)	Pass
RLI Product Item #	82100

Features(1) API Service Classifications GL-3, GL-4 and SAE 90(2) Super high viscosity index and low pour point for wide temperature usage(3) Fortified with additives to resist wear, oxidation, rust and foam

(4) Exceeds U.S. Steel and AGMA wear and EP performance

STABILIZED by Renewable Lubricants\* is RLI's trademark on their proprietary and patented anti-oxidant, anti-wear, and cold flow technology. High Oleic Base Stock (HOBS) are agricultural vegetable oils. This Stabilized technology allows the HOBS to perform as a high performance formula in high and low temperature applications, reducing oil thickening and deposits.

<sup>1</sup> Ultimate Biodegradation (Pw1) within 28 days in ASTM D-5864 Aerobic Aquatic Biodegradation of Lubricants

Patented Product: US Patent 6,383,992, US Patent 6,534,454 with additional Pending and Foreign Patents

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<u>Availability</u>	F.O.B. :Hartville, Ohio, USA	<u>1 Gallon</u>	<u>5 Gallon Pail</u>	<u>Drum</u>	<b>Totes</b>	<u>Bulk</u>
RLI Item #		82103	82104	82106	82107	82109